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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,065	09/24/2001	Norio Hama	110564	5210

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EXAMINER	
ENG, GEORGE	

ART UNIT	PAPER NUMBER
2643	8

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/961,065	HAMA, NORIO	
	Examiner	Art Unit	
	George Eng	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 September 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed 9/24/2001 (paper no. 5) has been considered.

Response to Preliminary Amendment

3. This Office action is in response to the preliminary amendment filed 12/14/2001 (paper no. 6).

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a **single** paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the term "may" renders the claim vague and indefinite because the term "may" has an alternate meaning, which does not positively identify the claimed limitation. In addition, the term "any" in claims 4, 7 and 8 also renders the claim vague and indefinite for the reason above.

Claims 2-11 are also rejected because of depending on claim 1 containing the same deficiency.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Carlson (US PAT. 6,374,082).

Regarding claim 1, Carlson discloses a wireless communication device (26, figure 2) driven by an internal power supply (abstract) comprising disturbance component extracting means (56, figure 3) for extracting a disturbance component that affects the device's wireless communication signal from a signal received by a receiving antenna (20, figure 2), disturbance wave periodicity detecting means (32, figure 3) for detecting the radiation by the disturbance component extracted by the disturbance component extracting means with a frequency-divided signal obtained at a gradually varying frequency dividing ratio with respect to a clock signal of a predetermined frequency and communication control means (24, figure 2) for performing the exchange of a communication packet during a quiescent state, i.e., a radiation-free period of time, within the radiation period detected by the disturbance wave periodicity detecting means (the entire patent).

Regarding claim 2, Carlson discloses the disturbance wave periodicity detecting means comprising a frequency divided circuit for gradually increasing a frequency dividing ration with respect to an input of clock signal, i.e., a master clock signal, of a predetermined frequency and a period determination circuit for determining the period of a disturbance wave by comparaing a signal received by a receiving antenna with a frequency-divided signal form said frequency dividing circuit (col. 3 line 62 through col. 4 line 11).

Regarding claim 3, Carlson discloses the communication control means comprising communication continuing means for shifting the transmission frequency of a control signal to keep the communication connection established into a present disturbance-free frequency band

to continue the communication connection when the radiation period of a disturbance wave is detected by the disturbance periodicity detecting means (col. 3 lines 27-36 and col. 4 lines 11-17).

Regarding claim 4, Carlson discloses the communication control means comprising transmission means for notifying the presence and period of a disturbance wave to communication partner, which cannot detect the presence of the disturbance wave when the radiation period of the disturbance wave is detected by the disturbance wave periodicity detecting means (col. 4 lines 18-34).

Regarding claims 7-8, the limitations of the claims are rejected as the same reasons set forth in claim 4.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 5-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (US PAT. 6,374,082).

Regarding claims 5-6, Carlson differs from the claimed invention in not specifically teaching power control means for controlling the power depending on the radiation period of the disturbance wave detected by the disturbance wave periodicity detecting means so that the power

control means is configured to determine whether a communication packet can be transmitted when the radiation period of a disturbance wave is detected by the disturbance wave periodicity detecting means and to discontinue the power control when the communication packet cannot be transmitted. However Carlson teaches the communication control means to conduct communication only during the quiescent period (col. 3 lines 8-11 and col. 4 lines 11-13) so that one skill in the art would recognize the wireless communication device further comprising power control means for controlling power distribution to the wireless communication only when a communication is conducted depending on the radiation period of the disturbance wave detected by the disturbance wave periodicity detecting means, i.e., only providing power when the periodic noise in the quiescent state, in order to suppress unnecessary power consumption.

Regarding claims 9-11, the limitations of the claims are rejected as the same reasons set forth in claims 5-6.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Klank (US PAT. 6,690,658) discloses a correlation method for providing a time reference system to synchronize a receiver of indoor communication system to avoid collisions within the own frame and to ensure transmission of the defined data rates (abstract).

Carlson (US PAT. 6,349,198) discloses a wireless control system for use in system having a plurality of periodic noise sources including an antenna, an RF receiver, a phase synchronization circuit and a noise source control circuit (the entire patent).

Ubowski et al. (US PAT. 6,316,758) discloses an adaptive microwave oven for entering an operation mode, which avoids interference with a communication device either upon detection of a communication from a communication device operating in a microwave frequency range or upon receipt of a command indicating the operation of a microwave device (abstract).

Roberts et al. (US PAT. 6,006,071) discloses RF communication system operable in the presence of a repetitive interference source (abstract).

12. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

George Eng
Primary Examiner
Art Unit 2643